Goals: By the end of this activity, you should understand linear equations and their use in everyday situations and know how solve them.

Pumpkin Activity Part 1

At the pumpkin patch, pick out your own pumpkin. The cost to get in to the farm was $5 per person, and each pumpkin costs $0.85 per pound, calculate the cost of your own pumpkin, and your classmate’s pumpkins (assuming each classmate picks out a different size pumpkin). Record your answers in the chart below.

Create an equation that can determine the total cost

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| Weight of the pumpkin | Equation | Total Cost  |
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Pumpkin Activity Part 2

The farm decided to change the pricing of the pumpkins. The cost to get into the farm is still the same. If a pumpkin is small and it weighs less than 5 pounds, the pumpkin costs $0.88 per pound. If the pumpkin is medium, weighs more than 5 pounds and less than 9 pounds, the pumpkin costs $0.77 per pound. If the pumpkin is large, weighs more than 9 pounds, the pumpkin costs $0.66 per pound.

Create an equation for the total cost of each size of a pumpkin:

Small Pumpkins: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Medium Pumpkins: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Large Pumpkins: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| Weight of the pumpkin | Equation | Total Cost  |
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Pumpkin Activity Part 3

The pumpkin patch put their pricing back to the way it was before, each pumpkin costs $0.85 per pound and the cost to get in is still $5. Use these costs to answer the questions below.

1. If you only have $5.00. What is the largest pumpkin you can afford?
2. If you only have $10.00, what is the largest pumpkin you can afford?

1. If you have $20.00, what is the largest pumpkin you can buy?
2. Assume that the prices went back to the way they were in part 2, the size of the pumpkin changes the price per pound. If you have $15, how big of a pumpkin can you afford?